UNITED STATES PATENT AND TRADEMARK OFFICE

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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>25 June 2008</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-35,37-39 and 42-44</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) <u>10 and 39</u> is/are allowed.
6) ☒ Claim(s) <u>1-9,11-35, 37, 38, and 42-44</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>12 September 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is in response to the Applicant's response filed on June 25, 2008. Claims

36, 40, and 41 have been cancelled by the Applicant. Claims 1 – 35, 37 – 39, and 42 –

44, where Claims 1, 10, 16, 25, 28, 32, and 44 are in independent form, are presented

for examination.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. A nonstatutory
obviousness-type double patenting rejection is appropriate where the conflicting claims
are not identical, but at least one examined application claim is not patentably distinct
from the reference claim(s) because the examined application claim is either anticipated
by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140
F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.
1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422
F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d)
may be used to overcome an actual or provisional rejection based on a nonstatutory
double patenting ground provided the conflicting application or patent either is shown to
be commonly owned with this application, or claims an invention made as a result of
activities undertaken within the scope of a joint research agreement.
Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

Claims 10 and 32 are rejected on the ground of nonstatutory obviousness-type

double patenting as being unpatentable over Claim 1 of U.S. Patent No. 7,424,528.

Although the conflicting claims are not identical, they are not patentably distinct from

each other because the current application claims the same method and system of

identifying and determining the workload demand for a particular server that is providing

concurrent connections to a plurality of clients where the demand is computed using the

same particular algorithm disclosed previously in U.S. Patent 7,424,528.

Patent No. 7,424,528	U.S. Appl. 10/660978
Claim 1: A method comprising: **identifying a mixed workload, wherein the mixed workload corresponds to a number of media streams being served concurrently by a media server to a population of clients** wherein all of said number of media streams do not comprise common content encoded at a common bit rate; and **measuring the capacity of the media server for supporting the mixed workload by using a cost function to compute a load for the media server** under the mixed workload **wherein the cost function for computing the load of the media server** comprises: (NOTE: due to difficulties of writing equations on a word processor and the time necessary to do so, the equation	Claim 10: A method comprising: **receiving, into a capacity planning tool, configuration information for at least one streaming media server**; receiving, into said capacity planning tool, **workload information for a workload of client accesses of streaming media files from a server**; said **capacity planning tool evaluating a capacity of the at least one streaming media server for supporting the workload**; wherein said **evaluating comprises computing a service demand for said at least one streaming media server** supporting said workload; and **wherein said computing said service demand comprises** computing:

| summarized: the **load for the server is the addition of two separate sums, one associated with the bitrate for memory access and the other associated with the bitrate for disk access on the server)** | (NOTE: due to difficulties of writing equations on a word processor and the time necessary to do so, the equation summarized: the **demand for the server is the addition of two separate sums, one associated with the bitrate for memory access and the other associated with the bitrate for disk access on the server)**

Claim 32:

A system comprising:

a media profiler operable to receive a client access log collected over a period of time for a service provider's site and generate a workload profile for the service provider's site, **wherein said workload profile comprises for a plurality of different points in time, identification of a number of concurrent client accesses, wherein the number of concurrent client accesses are categorized into corresponding** |

	encoding bit rates of streaming media files accessed thereby and are further sub-categorized into either memory or disk accesses: and a capacity evaluator operable to receive the generated workload profile and evaluate at least one server configuration's capacity for supporting the site's workload. (NOTE: identification of concurrent client accesses and categorization into encoding bitrates and further sub-categorization into either memory or disk access is described within the equation itself; client log is inherent the server needs to know the client accesses and the associated bitrates)

Claim Objections

Claims 38 and 39 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The objections are withdrawn.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28 – 35, 37, and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,516,350, invented by Leon L. Lumelsky et al. (hereinafter "Lumelsky").

In the interest of expedited prosecution, the Examiner would like to note that several of the present claims (i.e., Claims 32 – 35, 37, and 43) use functional language to describe claim elements. For example, the terms "operable to" raise questions as to the limiting effect of the functional language that follows them. The Examiner recommends amending the claims to contain positive recitations of the actions performed by the claim elements, rather than merely stating that the elements are "operable to" perform some future act. In the event that a hardware element is intended to contain software, which when executed, causes the hardware element to perform a function, the language of the claim should clearly express that relationship.

In the interest of expedited prosecution, all of these limitations have been rejected below, but Application is encouraged to amend the "operable to" claims so that the claimed functions are positively recited, to ensure that those limitations may be given patentable weight.

1.   Regarding Claim 28, Lumelsky discloses a method (Col. 5, Lines 12-15) comprising of receiving workload information identifying an expected workload of client accesses of streaming media files from a server over a period of time [Col. 8, Lines 66-67; Col. 9, Lines 1-8; finds their rate, density and proximity] and determining a service demand profile for at least one server configuration under evaluation for evaluating a

capacity of said at least one server configuration for supporting the expected workload

[Col. 7, Lines 4-8; monitoring with respect to the performance of multiple end resources

and clients and their usage patterns so as to provide parameters on where, when, and

how to satisfy a request], wherein said service demand profile comprises a plurality of

pairs of information, each pair comprising an identification of a duration of time in said

period of time and a corresponding computed resource cost of the at least one server

configuration for serving the workload over the duration of time [Fig. 9; Col. 12, Lines 2-

7; the SCP determines when additional resources are required to meet the service

demands where there are time intervals to determine when one server cannot meet all

the demands based on its capacity].

2.   Regarding Claim 29, Lumelsky discloses all the limitations of Claim 28 and

further discloses a method further comprising of receiving at least one service

parameter [Col. 9, Lines 45-50].

3.   Regarding Claim 30, Lumelsky discloses all the limitations of Claim 29 and

further discloses a method wherein said at least one service parameter comprises

information identifying at least one performance criteria desired to be satisfied by said at

least one server configuration under the expected workload [Col. 9, Lines 45-50].

4.   Regarding Claim 31, Lumelsky discloses all the limitations of Claim 29 and

further discloses a method further comprising of evaluating the determined service

demand profile for the at least one server configuration to determine whether the at

least one server configuration satisfies the received at least one service parameter [Col.

9, Lines 45-50 and 58-64].

5.   Regarding Claim 32, Lumelsky discloses a system [Col. 5, Lines 12-15]

comprising of a media profiler operable to receive a client access log collected over a

period of time for a service provider's site [Col. 10, Lines 21-26; user preferences, such

as interactivity level] and generate a workload profile for the service provider's site [Col.

7, Lines 4-8; monitoring with respect to the performance of multiple end resources and

clients and their usage patterns so as to provide parameters on where, when, and how

to satisfy a request], wherein said workload profile comprises, for a plurality of different

points in time [Fig. 9; workload viewed in various points of time], identification of a

number of concurrent client accesses [Fig. 9; number of client accesses calculated],

wherein the number of concurrent client accesses are categorized into corresponding

encoding bit rates of streaming media files accessed thereby and are further sub-

categorized into either memory or disk accesses [Figs. 10 and 11; Col. 12, Lines 36-41;

to fulfill a request the use of any combination of storage, memory, processing power,

and bandwidth is determined], and a capacity evaluator operable to receive the

generated workload profile and evaluate at least one server configuration's capacity for

supporting the site's workload [Col. 9, Lines 45-50, mapping requests to the particular

server(s) based on factors such as aggregate demand statistics and willingness of the

servers to provide the requested services].

6.   Regarding <u>Claim 33</u>, Lumelsky discloses all the limitations of Claim 32 and

further discloses a system wherein said capacity evaluator is further operable to

receive configuration information for said at least one server configuration [Col. 10,

Lines 33-39].

7.   Regarding <u>Claim 34</u>, Lumelsky discloses all the limitations of Claim 32 and

further discloses a system wherein in evaluating said at least one server configuration's

capacity, said capacity evaluator determines whether said at least one server

configuration is capable of supporting the site's workload in accordance with at least

one service parameter [Col. 10, Lines 26-39].

8.   Regarding Claim 35, Lumelsky discloses all the limitations of Claim 34 and

further discloses a system wherein said at least one service parameter comprises

information identifying at least one performance criteria desired to be satisfied by said at

least one server configuration under the site's workload [Col. 10, Lines 26-39].

9.   Regarding Claim 37, Lumelsky discloses all the limitations of Claim 32 and

further discloses a system wherein in evaluating said at least one server configuration's

capacity said capacity evaluator is operable to generate a service demand profile for

said at least one server configuration [Col. 9, Lines 58-64].

10.   Regarding Claim 43, Lumelsky discloses all the limitations of Claim 37 and

further discloses that the service demand profile comprises a plurality of pairs of

information, each pair comprising identification of a duration of time in said period of

time and a corresponding computed resource cost of the at least one server

configuration for serving the workload over the duration of time [Fig. 9; Col. 12, Lines 2-

7; the SCP determines when additional resources are required to meet the service

demands where there are time intervals to determine when one server cannot meet all

the demands based on its capacity].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 9, 11 – 27, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumelsky, in view of U.S. Appl. 2002/0029373, filed by Mark Haroldson et al. (hereinafter "Haroldson").

11.   Regarding <u>Claim 1</u>, Lumelsky discloses a method [Col. 5, Lines 12-15] comprising of receiving, into a capacity planning tool (Service Control Plane), configuration information for at least one streaming media server [Col. 8, Lines 66-67; Col. 9, Lines 1-8; monitors the availability of the resources], receiving, into said capacity planning tool, workload information for a workload of client accesses of streaming media files from a server [Col. 8, Lines 66-67; Col. 9, Lines 1-8; finds their rate, density and proximity], and said capacity planning tool evaluating a capacity of the at least one streaming media server for supporting the workload [Col. 7, Lines 4-8; monitoring with respect to the performance of multiple end resources and clients and their usage patterns so as to provide parameters on where, when, and how to satisfy a request]. Lumelsky does not disclose that the configuration information comprises a single file benchmark and a unique file benchmark for the at least one streaming media server.

Haroldson discloses a system and method for calculating usage data related to multimedia broadcasts includes a single file benchmark and a unique file benchmark for the at least one streaming media server [Para. 0005; calculating concurrent connections for a particular server and/or a specific data stream]. It would have been obvious to one skilled in the art at the time of the invention to calculate the concurrent connections for a particular server and a specific data stream since one sever can host more than one

data stream and likewise, one data stream can be hosted by more than one server.

Retrieving this information will allow a content provider to more accurately bill a user

based on more accurate usage information for that particular content.

12.   Regarding Claim 2, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 1. Lumelsky further discloses that said configuration information includes

identification of size of memory of said at least one streaming media server [Col. 8,

Lines 20-22; Fig. 10].

13.   Regarding Claim 3, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 2. Lumelsky further discloses that said configuration information further

includes disk configuration of said at least one streaming media server [Col. 12, Lines

26-34; Fig. 10].

14.   Regarding Claim 4, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 1. Lumelsky further discloses that said workload information includes

identification of number of concurrent client accesses of said streaming media files over

a period of time [Col. 7, Lines 4-8; Fig. 9].

15.   Regarding Claim 5, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 4. Lumelsky further discloses that said workload information further includes

identification of a corresponding encoding bit rate of each of said streaming media files

accessed [Col. 8, Lines 66-67; Col. 9, Lines 1-2].

16.   Regarding Claim 6, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 1. Lumelsky further discloses that said workload information comprises

information from an access log collected over a period of time [Col. 6, Lines 18-21].

17.   Regarding Claims 7 and 38, Lumelsky, in view of Haroldson, discloses all the

limitations of Claim 1. Lumelsky further discloses that said evaluating comprises of

computing a cost corresponding to resources of said at least one streaming media

server that are consumed, in supporting the workload [Col. 10, Lines 45-47, 51-53].

18.   Regarding Claim 8, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 7. Lumelsky further discloses that said computing said cost comprises

computing a cost of consumed resources for a stream in said workload having a

memory access to a streaming media file and computing a cost of consumed resources

for a stream in said workload having a disk access to a streaming media file [Col. 9,

Lines 58-64; Col. 12, Lines 26-34].

19.   Regarding Claim 9, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 1. Lumelsky further discloses that said evaluating comprises of computing a

service demand for said at least one streaming media server supporting said workload

[Col. 8, Lines 66-67; Col. 9, Lines 1-8].

20.   Regarding Claim 11, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 1. Lumelsky further discloses that the method receives at least one service

parameter [Col. 9, Lines 58-64].

21.   Regarding Claim 12, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 11. Lumelsky further discloses that said at least one service parameter

comprises information identifying at least one performance criteria desired to be

satisfied by said at least one streaming media server under the workload [Col. 9, Lines

58-64].

22.   Regarding Claim 13, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 12. Lumelsky further discloses that said at least one performance criteria

specifies a minimum percentage of time that said at least one streaming media server is

desired to be capable of supporting the workload [Col. 9, Lines 58-67; Co1.10, Lines 1-

6].

23.   Regarding <u>Claim 14</u>, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 11. Lumelsky further discloses that said at least one service parameter

comprises information identifying a constraint [Col. 9, Lines 58-67; Col. 10, Lines 1-6].

24.   Regarding <u>Claim 15</u>, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 11. Lumelsky further discloses that said evaluating further comprises of

evaluating whether said at least one streaming media server satisfies said at least one

service parameter [Col. 9, Lines 58-67; Co1.10, Lines 1-6].

25.   Regarding <u>Claim 16</u>, Lumelsky discloses a method and system [Col. 5, Lines 12-

15] comprising of receiving, into said capacity planning tool, workload information for a

workload of client accesses of streaming media files from a server [Col. 8, Lines 66-67;

Col. 9, Lines 1-8; finds their rate, density and proximity], and said capacity planning tool

evaluating a capacity of the at least one streaming media server for supporting the

workload [Col. 7, Lines 4-8; ,monitoring with respect to the performance of multiple end

resources and clients and their usage patterns so as to provide parameters on where,

when, and how to satisfy a request]. Lumelsky does not specifically disclose that this'

method would be in computer-executable software code or stored to a computer-

readable medium. Lumelsky does not disclose that the configuration information

comprises a single file benchmark and a unique file benchmark for the at least one

streaming media server.

Haroldson discloses a system and method for calculating usage data related to multimedia broadcasts includes a single file benchmark and a unique file benchmark for the at least one streaming media server [Para. 0005; calculating concurrent connections for a particular server and/or a specific data stream]. It would have been obvious to one skilled in the art at the time of the invention to calculate the concurrent connections for a particular server and a specific data stream since one sever can host more than one data stream and likewise, one data stream can be hosted by more than one server. Retrieving this information will allow a content provider to more accurately bill a user based on more accurate usage information for that particular content.

It is commonly known to one skilled in the art at the time of the invention that any method decoding and processing information in an electrical device is executed through program instructions stored in the electrical device; in particular computer-executable software code for servers or computers used to configure information. Furthermore, these instructions are stored in a variety of computer readable media, such as within the device's memory, flash-drives, compact disks, etc. It is obvious to one skilled in the art that any method for decoding or processing electronic information is in the form of program instructions to be read by an electronic device, thus stored in computer readable media. Some of the benefits of using computer readable media to store the program instructions are to allow the electronic device to have more flexibility, such as allowing other processes to run, and to ease the transferability of the instructions, and updates to them, onto the electronic device.

26.   Regarding Claim 17, Lumelsky, in view of Haroldson, discloses all the limitations of Claim 16 above. Lumelsky further discloses a code for receiving configuration

information for said at least one system configuration [Col. 8, Lines 66-67; Col. 9, Lines 1-8].

27.   Regarding Claim 18, Lumelsky, in view of Haroldson, discloses all the limitations of Claim 16 above. Lumelsky further discloses a code for determining whether said at least one system configuration is capable of supporting said workload in accordance with at least one service parameter [Col. 10, Lines 26-39].

28.   Regarding Claim 19, Lumelsky, in view of Haroldson, discloses all the limitations of Claim 18. Lumelsky further discloses a code wherein said at least one service parameter comprises information identifying at least one performance criteria desired to be satisfied by said, at least one system configuration under the workload [Col. 9, Lines 58-64].

29.   Regarding Claim 20, Lumelsky, in view of Haroldson, discloses all the limitations of Claim 16 above. Lumelsky further discloses a code for generating a workload profile for the received workload information [Col. 6, Lines 18-21; Col 9, Lines 45-64; Col., 10, Lines 19-26].

30.   Regarding Claim 21, Lumelsky, in view of Haroldson, discloses all the limitations of Claim 20 above. Lumelsky further discloses a code wherein the received workload information comprises an access log collected over a period of time [Col. 10, Lines 19-26].

31.   Regarding Claim 22, Lumelsky, in view of Haroldson, discloses all the limitations of Claim 20 above. Lumelsky further discloses a code wherein said workload profile comprises of a plurality of different points in time, identification of a number of concurrent client accesses, wherein the number of concurrent client accesses are

categorized into corresponding encoding bit rates of streaming media files accessed

thereby and are further sub-categorized into either memory or disk accesses [Figs. 10

and 11; Col. 12, Lines 36-41].

32.   Regarding Claim 23, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 16 above. Lumelsky further discloses a code for generating a service demand

profile for said at least one system configuration [Col. 9, Lines 58-64].

33.   Regarding Claim 24, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 16 above. Lumelsky further discloses a code for evaluating a capacity of a

plurality of different system configurations and determining an optimal one of said

plurality of different system configurations for supporting the workload [Col. 10, Lines

45-53].

34.   Regarding Claim 25, Lumelsky discloses a system [Col: 5, Lines 12-15]

comprising of means for receiving configuration information for a plurality of different

system configurations [Col. 8, Lines 66-67; Col. 9, Lines 1-8; monitors the availability of

the resources], means for receiving workload information for a workload of client

accesses of streaming media files from a server [Col. 8, Lines 66-67; Col. 9, Lines 1-8;

finds their rate, density and proximity], and means for evaluating the capacity of each of

said plurality of different system configurations for supporting said workload [Col. 8,

Lines 66-67; Col. 9, Lines 1-8].   Lumelsky does not disclose that the configuration

information comprises a corresponding single file benchmark and unique file

benchmark, wherein said single file benchmark measures capacity of the corresponding

system configuration for serving a population of clients that all access a same file,

wherein said unique file benchmark measures capacity of the corresponding system

configuration for serving a population of clients that all access different files.

Haroldson discloses a system and method for calculating usage data related to

multimedia broadcasts includes a corresponding single file benchmark and unique file

benchmark, wherein said single file benchmark measures capacity of the corresponding

system configuration for serving a population of clients that all access a same file,

wherein said unique file benchmark measures capacity of the corresponding system

configuration for serving a population of clients that all access different files [Para. 0005;

calculating concurrent connections for a particular server and/or a specific data stream].

It would have been obvious to one skilled in the art at the time of the invention to

calculate the concurrent connections for a particular server and a specific data stream

since one sever can host more than one data stream and likewise, one data stream can

be hosted by more than one server. Retrieving this information will allow a content

provider to more accurately bill a user based on more accurate usage information for

that particular content.

35.   Regarding <u>Claim 26,</u> Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 25 above. Lumelsky further discloses a means for determining an optimal one

of said plurality of different system configurations for supporting said workload [Col. 9,

Lines 45-50].

36.   Regarding <u>Claim 27</u>, Lumelsky, in view of Haroldson, discloses all the limitations

of Claim 26 above. Lumelsky further discloses a means for determining the most cost-

effective one of said plurality of different system configurations for supporting said

workload according to determined service parameters [Col. 10, Lines 45-53].

37.   Regarding <u>Claim 42</u>, Lumelsky discloses all the limitations of Claim 28 above. Lumelsky does not disclose that the configuration information comprises a single file benchmark and a unique file benchmark for the at least one streaming media server.

Haroldson discloses a system and method for calculating usage data related to multimedia broadcasts includes a single file benchmark and a unique file benchmark for the at least one streaming media server [Para. 0005; calculating concurrent connections for a particular server and/or a specific data stream]. It would have been obvious to one skilled in the art at the time of the invention to calculate the concurrent connections for a particular server and a specific data stream since one sever can host more than one data stream and likewise, one data stream can be hosted by more than one server. Retrieving this information will allow a content provider to more accurately bill a user based on more accurate usage information for that particular content.

38.   Regarding <u>Claim 44</u>, Lumelsky discloses a method [Col. 5, Lines 12-15] comprising of receiving, into a capacity planning tool (Service Control Plane), configuration information for at least one streaming media server [Col. 8, Lines 66-67; Col. 9, Lines 1-8; monitors the availability of the resources], receiving, into said capacity planning tool, workload information for a workload of client accesses of streaming media files from a server [Col. 8, Lines 66-67; Col. 9, Lines 1-8; finds their rate, density and proximity], and said capacity planning tool evaluating a capacity of the at least one streaming media server for supporting the workload [Col. 7, Lines 4-8; monitoring with respect to the performance of multiple end resources and clients and their usage patterns so as to provide parameters on where, when, and how to satisfy a request]. Lumelsky does not disclose that the configuration information comprises a

corresponding single file benchmark and unique file benchmark, wherein said single file

benchmark measures capacity of the corresponding system configuration for serving a

population of clients that all access a same file, wherein said unique file benchmark

measures capacity of the corresponding system configuration for serving a population of

clients that all access different files.

Haroldson discloses a system and method for calculating usage data related to

multimedia broadcasts includes a corresponding single file benchmark and unique file

benchmark, wherein said single file benchmark measures capacity of the corresponding

system configuration for serving a population of clients that all access a same file,

wherein said unique file benchmark measures capacity of the corresponding system

configuration for serving a population of clients that all access different files [Para. 0005;

calculating concurrent connections for a particular server and/or a specific data stream].

It would have been obvious to one skilled in the art at the time of the invention to

calculate the concurrent connections for a particular server and a specific data stream

since one sever can host more than one data stream and likewise, one data stream can

be hosted by more than one server. Retrieving this information will allow a content

provider to more accurately bill a user based on more accurate usage information for

that particular content.

Allowable Subject Matter

Claim 10 is allowed.

Claim 39 is objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

Conclusion

Examiner's Note: Examiner has cited particular figures, columns, line numbers, and/or paragraphs in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,594,699 B1; U.S. App. 2001/0027479 A1; U.S. App. 2002/0029273 A1; U.S. Patent 5,732,239 AA1; U.S. Patent 6,067,107 A1; U.S. Patent 6,263,361 B1; U.S. Patent 6,279,039 B1; U.S. Patent 6,330,609 B1; U.S. App. 2002/0083124 A1; U.S. App. 2002/0129048 A1; U.S. Patent 6,466,980 B1; U.S. App. 2002/0156552 A1.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae K. Kim, whose telephone number is (571) 270-1979. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne, can be reached on (571) 272-4001. The fax phone number for

submitting all Official communications is (703) 872-9306. The fax phone number for

submitting informal communications such as drafts, proposed amendments, etc., may

be faxed directly to the examiner at (571) 270-2979.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at (866) 217-9197 (toll-free).

/Tae K. Kim/

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